

FORM PTO-1590 (Modified)  
(REV. 11-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

2762 38053

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

107019078

INTERNATIONAL APPLICATION NO  
PCT/IB99/01166INTERNATIONAL FILING DATE  
22 June 1999PRIORITY DATE CLAIMED  
NONE

TITLE OF INVENTION  
**IN VIVO INSECT MODEL SYSTEM FOR TYPE-2 DIABETES**

APPLICANT(S) FOR DO/EO/US  
**HAFEN, Ernst**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☒ A copy of the International Preliminary Examination Report (PCT/PEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

**Items 13 to 20 below concern document(s) or information included:**

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☒ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. ☒ Certificate of Mailing by Express Mail
23. ☒ Other items or information:

**Corrected International Preliminary Examination Report; Sequence Listing in paper form; Sequence Statement pursuant to 37 C.F.R. 1.821-1.825; and Return receipt post card.**

U.S. APPLICATION NO. (IF KNOWN, SEE [REDACTED])	INTERNATIONAL APPLICATION NO. <b>PCT/IB99/01166</b>	ATTORNEY'S DOCKET NUMBER <b>27656/38053</b>
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<p>24. The following fees are submitted:</p> <p><b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</b></p> <p><input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... <b>\$1040.00</b></p> <p><input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... <b>\$890.00</b></p> <p><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$740.00</b></p> <p><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$710.00</b></p> <p><input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... <b>\$100.00</b></p> <p style="text-align: center;"><b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b></p> <p>Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492 (e)). <input type="checkbox"/> 20 <input type="checkbox"/> 30</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">CLAIMS</th> <th style="width: 20%;">NUMBER FILED</th> <th style="width: 20%;">NUMBER EXTRA</th> <th style="width: 20%;">RATE</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>Total claims</td> <td>34 - 20 =</td> <td>14</td> <td>x \$18.00</td> <td><b>\$252.00</b></td> </tr> <tr> <td>Independent claims</td> <td>3 - 3 =</td> <td>0</td> <td>x \$84.00</td> <td><b>\$0.00</b></td> </tr> <tr> <td colspan="4">Multiple Dependent Claims (check if applicable) <input type="checkbox"/></td> <td><b>\$0.00</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td><b>\$1,142.00</b></td> </tr> <tr> <td colspan="4"> <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.         </td> <td><b>\$0.00</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>SUBTOTAL =</b></td> <td><b>\$1,142.00</b></td> </tr> <tr> <td colspan="4">           Processing fee of <b>\$130.00</b> for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492 (f)). <input type="checkbox"/> 20 <input type="checkbox"/> 30 +         </td> <td><b>\$0.00</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>TOTAL NATIONAL FEE =</b></td> <td><b>\$1,142.00</b></td> </tr> <tr> <td colspan="4">           Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). <input type="checkbox"/> </td> <td><b>\$0.00</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>TOTAL FEES ENCLOSED =</b></td> <td><b>\$1,142.00</b></td> </tr> <tr> <td colspan="4"></td> <td style="text-align: right;">Amount to be: refunded \$</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: right;">charged \$</td> </tr> </tbody></table>	CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		Total claims	34 - 20 =	14	x \$18.00	<b>\$252.00</b>	Independent claims	3 - 3 =	0	x \$84.00	<b>\$0.00</b>	Multiple Dependent Claims (check if applicable) <input type="checkbox"/>				<b>\$0.00</b>	<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,142.00</b>	<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				<b>\$0.00</b>	<b>SUBTOTAL =</b>				<b>\$1,142.00</b>	Processing fee of <b>\$130.00</b> for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492 (f)). <input type="checkbox"/> 20 <input type="checkbox"/> 30 +				<b>\$0.00</b>	<b>TOTAL NATIONAL FEE =</b>				<b>\$1,142.00</b>	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). <input type="checkbox"/>				<b>\$0.00</b>	<b>TOTAL FEES ENCLOSED =</b>				<b>\$1,142.00</b>					Amount to be: refunded \$					charged \$	<b>CALCULATIONS PTO USE ONLY</b>
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- a. ☒ A check in the amount of **\$1,142.00** to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. **13-2855**. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Jeffrey S. Sharp  
 Customer No.: 04743  
**MARSHALL, GERSTEIN & BORUN**  
 6300 Sears Tower  
 233 South Wacker Drive  
 Chicago, Illinois 60606  
 United States of America

SIGNATURE

Jeffrey S. Sharp

NAME

31,879

REGISTRATION NUMBER

20 December 2001

DATE

10/019078  
531 Rec'd PCT.

20 DEC 2001

PATENT APPLICATION  
Attorney Docket No. 27656/38053

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

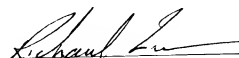
Applicant: HAFEN, Ernst )  
U.S. National Phase of PCT/IB99/01166 filed )  
22 June 1999 )  
Filed: Herewith )  
For: IN VIVO INSECT MODEL SYSTEM )  
FOR TYPE-2 DIABETES )  
Group Art Unit: Unassigned )  
Examiner: Unassigned )  
Attorney Docket No. 27656/35053 )

CERTIFICATION UNDER 37 CFR 1.10

Box PCT  
Commissioner for Patents  
Washington, D.C. 20231

I hereby certify the attached items are being deposited with the United States Postal Service on November 26, 2001 in an envelope addressed to Box PCT, Commissioner for Patents, Washington, D.C. 20231 utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Mailing No. EK 657 819 788 US:

- a. Transmittal letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371;
- b. Sequence Listing in both paper and computer readable forms;
- c. Sequence Statement pursuant to 37 C.F.R. 1.821-1.825;
- d. International Preliminary Examination Report;
- e. Corrected Preliminary Examination Report;
- f. Preliminary Amendment;
- g. Return receipt post card; and
- h. A check in the amount of \$1,142.00.

  
Richard Zimmermann

Date: December 20, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: HAFEN, Ernst )  
U.S. National Phase of PCT/IB99/01166 filed )  
22 June 1999 )  
Filed: Herewith )  
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**FOR TYPE-2 DIABETES** )

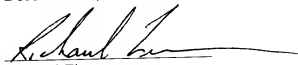
Group Art Unit: Unassigned )

Examiner: Unassigned )

Attorney Docket No. 27656/35053 )

I hereby certify that this paper is being deposited with the United States Postal Service on **December 20, 2001**, in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231 utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Mailing Label No. **EK 657 819 788 US**.

December 20, 2001

  
Richard Zimmermann

STATEMENT UNDER 37 C.F.R. §§1.821(f)

BOX PCT  
Commissioner for Patents  
Washington, DC 20231

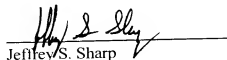
Sir:

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted herewith in accordance with 37 C.F.R. §§1.821 and 1.825, are the same.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN  
6300 Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606-6402  
(312) 474-6300

By

  
Jeffrey S. Sharp  
Registration No. 31,879  
Attorney for Applicants

December 20, 2001